Integrated Pest Management Communications Workshop: Eastern/Southern Africa

March 1-6, 1998, Nairobi, Kenya

International Centre for Insect Physiology and Ecology (ICIPE)

E-mail/Internet Information and Communications:

Needs Assessment of IPM Researchers and Practitioners

Survey Results

A survey questionnaire was distributed to workshop participants, the purpose of which was to get a "snapshot" of a) participants' work or field of intervention, b) exposure to and experience with computers, and c) access to and use of the World Wide Web (WWW) and Email for IPM information gathering and exchange. Of 35 completed forms received, 32 were from African participants.

Results are presented below.

A. About your work
B. About your general computer experience
C. About your current access to and use of the World Wide Web (WWW) and/or E-mail

A. *About your work*

1. **What type of organization employs you? (circle all that apply)**

a) Academic	20.0%	
b) Research/Extension	57.1%	
c) Non-Governmental Organization	11.4%	
d) Administrative	0.0%	
e) Other (specify)	11.4%	- Bilateral technical assistance programme - Museum - FAO - Government

2. **What is(are) your area(s) of IPM/Crop Protection interest/expertise?**

Approximately 50% of responses identified horticultural crops as being of IPM interest (Table 1). Legumes were mentioned most often, followed by vegetables. Approximately one third of responses identified grain crops, with sorghum and maize being mentioned most often.

The data presented in Table 2 indicates that arthropods account for approximately 60% of the pest problems identified by respondents. Leaf feeders and stem/stalk boring insects were the most important groups of insect pests mentioned.

A little more than fifty percent of the management strategies mentioned by respondents could be divided in equal proportions and classified either as "biological" or "cultural control" methods (Table 3). Approximately one sixth of responses mentioned the use of pesticides (chemical and botanical) as management strategies. Approximately fifteen percent of responses indicated genetically-based management strategies.

Table 1. Crops identified by survey respondents as being their area of IPM expertise/interest (consolidated results).

Crops	List of Responses	Total Responses	% Total Responses	Unique Responses	% Unique Responses
Horticultural crops(3) *	Including: ● legumes/pulses(3): cowpeas(5), beans/french beans(4), groundnut(3), soybeans(2); ● vegetables(3): tomato(3), cabbage(2), and onion(2); ● fruits/nuts(0): banana(2), passion fruit(1), and cashew(1); ● flowers(1); ● root crops(1).	36	49.3%	15	51.7%
Basic grains / cereals(3)	Including: ● maize(8); ● sorghum(8); ● rice(2); ● millet(2); ● other(0): wheat(1), barley(1), and tef(1).	26	35.6%	8	27.6%
Other(0)	Including: ● stored products(3); ● cotton(2); ● sugarcane(2); ● forest crops(2); ● tropical crops(1), rape(1).	11	15.1%	6	20.7%
		73		**29**	

* numbers in parentheses are total number of occurrences

Table 2. Pests identified by survey respondents as being their area of IPM expertise/interest (consolidated results).

Pests	List of Responses	Total Responses	% Total Responses	Unique Responses	% Unique Responses
Arthropods(0) *	Including: ● leaf feeders(0): aphids(3), diamondback moth(2), armyworms(1), whiteflies(1), leafhoppers(1), thrips(1), shootfly(1), red spider mites(1); ● stem/stalk borers(6): *B. fusca*(1), beanfly(1), ● fruit/pod borers(0): fruitfly(1), *Helopeltis* spp.(1); ● stored product pests(0): bruchids(2); ● locusts(2); ● other(0): termites(2), lepidopteran pests(1), wollo buch cricket(1), tsetse(1).	30	62.5%	19	57.6%
Diseases / pathogens(3)	Including: ● viruses(1); ● fungi(1): powdery mildew(1), *Fusarium* spp.(1), root/stem rots(1).	8	16.7%	6	18.2%
Weeds(0)	Including: ● parasitic weeds(1), *Striga*(2); ● water weeds(1).	4	8.3%	3	9.1%
Other(0)	Including: ● pests of stored products(2), pests of vegetables(1), pests of grains(1); ● rodents(1); ● nematodes(1).	6	12.5%	5	15.2%
		48		**33**	

* numbers in parentheses are total number of occurrences

Table 3. Management strategies identified by survey respondents as being their area of IPM expertise/interest (consolidated results).

Management strategies	List of Responses	Total Responses	% Total Responses	Unique Responses	% Unique Responses
Biological controls(9)*/ biorational methods(1)	Including: ● parasitoids/predators(2); ● entomopathogenic fungi(2); ● Bt(1); ● viruses(1).	16	28.6%	6	28.6%

Cultural controls/ management(9)	Including: ● farming systems(1), habitat management(1); ● trap cropping(1); ● trapping(1), physical control(1). -	14	25.0%	6	28.6%
Chemical controls(0)	Including: ● chemical pesticides(7), thresholds(2); ● botanical pesticides(3). -	12	21.4%	3	14.3%
Genetically-based controls(0)	Including: ● resistance(7); ● chemical ecology(1); ● behavior manipulation(1). -	9	16.1%	3	14.3%
Other(0)	Including: ● information dissemination(3); ● social organization/cooperation(1); ● conforming with legal framework(1). -	5	8.9%	3	14.3%
		56		**21**	

* numbers in parentheses are total number of occurrences

3. **With what category of people do you interact or collaborate with on a regular basis? (circle all that apply)**

a) Scientists / Researchers	91.4%	
b) Administrators	62.9%	
c) Extension Agents	68.6%	
d) Farmers/Community Groups	68.6%	
e) Decision/Policy Makers	62.9%	
f) Other (specify)	25.7%	- NGO's (14.3%) - Students (8.6%) - Donors (5.7%) - Exporters/Agrochemical Industry (5.7%) - Information specialists (2.9%)

B. *About your general computer experience*

1. **Which statement best describes your level of access to a computer workstation?**

a) **Full access:** My own workstation for my use or mainly my use	77.1%
b) **Ready access:** Not only for my use, others have regular access	11.4%
c) **Limited access:** A computer is available in the workplace for my use as use-sharing permits (or similar arrangement).	8.6%
d) **Indirect or infrequent access** through a colleague/friend in another organisation	0%
e) **Very little or no access**.	2.9%

2. How often do you use your computer?

a) daily, for most tasks	62.9%
b) daily, for some tasks	28.6%
c) weekly, for some tasks	2.9%
d) monthly, for some tasks	0%
e) never or very infrequently	5.7%

C. *About your current access to and use of the World Wide Web (WWW) and/or Electronic Mail (E-mail)*

1. Do you have access to the World Wide Web (WWW)?

Yes: 51.4%

2. If your answer to question C.1. was "No", do you think the WWW would be beneficial to you? What benefits would it have, and how would you use it? (Go to question C.5.)

Respondents indicated that access to the WWW would be beneficial because it would facilitate access to timely IPM information (scientific literature, extension publications, project/policy development, databases), and aid in information dissemination. Two respondents noted that the nature of information found on the WWW was of limited practical value. One indicated that Email was much more useful than the WWW.

3. How often do you use the WWW?

a. Regularly	28.6%	
b. Infrequently	14.3%	
c. Never	57.1%	(Numbers in table based on total responses)

55.5% of respondents with access to the WWW use it regularly.

4. Are there any sources of information on the WWW that you have found especially useful? Why? Please mention the name of the site, the organisation responsible, and, if you have it, the URL or 'address' of the WWW site (e.g. http://abcdefg.org). Those of you who have not used the WWW much can ignore this question.

Waicet for FAO - http://www.fao.org/

ILRI - http://www.cgiar.org/ilri/

IDRC - http://www.idrc.ca/

IPMnet - http://www.IPMnet.org/

CABI - http://www.cabi.org/

IPMEurope - http://www.nri.org/IPMEurope/homepage.htm

Forest, Trees and People - http://www-trees.slu.se/

5. Do you have access to an E-mail account?

Yes: 88.6%

6. If your answer to question C.5. was "No", do you think electronic mail would be beneficial to you? What benefits would it have, and how would you use it? (Go to section D)

Respondents indicated that Email access would enable them to communicate and exchange information with colleagues/scientists worldwide more effectively (at a much greater speed and at much lower cost).

7. How often do you use E-mail?

a. Regularly	71.4%
b. Infrequently	14.3%
c. Never	14.3%

(Numbers in table based on total responses)

80.6% of respondents with access to an Email account use Email regularly.

8. What E-mail software do you use or have access to?

(Results not presented because this question was primarily intended for the workshop's evening 'hands-on' sessions)

9. Do you belong to any list servers / mailing lists / discussion groups? If yes, please mention which lists and whether you find them useful in your work.

45.2% of respondents **with access to Email** belong to electronic discussion/mailing lists.